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ABSTRACT

The perceptions of parents of 113 developmentally delayed preschool children were compared with mental ages derived from the Cattell Infant Intelligence Scale and the Stanford Binet Intelligence Scale. With the parents as informants, an Alpern-Boll Developmental Profile was completed. Findings demonstrated a high degree of correlation between the child's test performance and the parents' estimate. Correlations indicated that parents were slightly more accurate in estimating the functioning level of an only child and the middle child, the older rather than the younger child, and the moderately and mildly retarded rather than the severely and profoundly retarded. Findings suggested that parents' awareness can be used to help professionals in evaluation. (CL)

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PARENT AWARENESS OF RETARDATION IN PRESCHOOL CHILDREN

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PARENT AWARENESS OF RETARDATION IN PRESCHOOL CHILDREN

This study, directed toward the informal view that parents rather than professionals are the real experts on their children, reports the perceptions of parents of 113 developmentally delayed preschool children compared with mental ages derived from the Cattell Infant Intelligence Scale and the Stanford-Binet Intelligence Scale. The Alpern-Boll Developmental Profile was used to estimate parents awareness of the child's functioning.

The results show significantly that parents are accurately aware of their child's functioning level; degree of retardation.

The study suggests that parents awareness can be utilized to aid the professionals as members of the treatment team pointing out differences in estimation.

This study also points out the important role of parents in joining the team of experts in evaluation.

Professionals in the field of mental health have been saying that parents are the real experts on their individual child and his problems but, for the most part, they have not acted like they really believed it. We as professionals have tended to highlight their distorted perceptions rather than their realistic awareness of their child's functioning level. We have not sufficiently tapped this resource as an accurate report of the child's functioning level.

Studies such as that by Schulman and Stern (1959) have shown that parents as a group are aware of the disabilities of their offspring. They asked fifty parents to estimate the developmental age of their retarded child before psychological tests were administered. Their estimates were converted into I.Q. scores and compared with the obtained I.Q. test scores. The correlation between the actual obtained I.Q. and the estimated quotient was +.67. They concluded that parents as a group are quite accurate in their assessment of the degree of mental retardation but that there was considerable variation from one individual estimate to another. Some parents underestimated while others overestimated.

Several studies have attempted to uncover the variables accounting the under or over estimating of parents. Capobianso and Knox (1964) compared parents I.Q. estimate with actual I.Q. measurement and looked at several other variables such as marital integration and family organization and mothers vs. fathers estimate. Twenty-seven husband and wife parents of retarded children ranging in age from 5 to 17 years were divided by sex and administered a modified Stanford-Binet, Form L, record booklet (items were arranged to eliminate progressive order of difficulty

and any possible reference to mental age level). The parents were asked to complete the test as they thought their child would. Both parents were then taken together and administered the Index of Marital Integration developed by Farber (1957). The authors found that no demonstrable relationship between marital integration scores and parental ability to estimate the I.Q.'s of the children. They did not find parents as accurate estimators of their children's I.Q. but found that fathers were significantly more accurate than mothers.

Ewert and Green (1957) attempted to relate the parent's estimate of the intellectual ability of his child to various attributes of his own. They explored the relationships between the mother's ability to estimate the age level of the child's behavior and the mother's personality traits. They made the assumption that the accuracy of the mother's perception of the retardation of her child was a measure of her acceptance or rejection of the child's condition. The validity of this assumption was not demonstrated in the study. They obtained data on fifty retarded children who did not have any serious physical pathology and on fifty children who had organic brain lesions. In both cases, the mother was asked to estimate the age level at which the child was currently functioning. That age was then transformed into an estimated I.Q. for comparison purposes. The mothers were then divided into two groups; those whose estimates were within 15 points of the obtained I.Q.'s and mothers whose estimates were more than 15 points from the obtained quotients. The two groups were then compared with several variables. The presence or absence of a physical anomaly was not related to the

validity of the estimate, nor was the sex of the child. There was a slight tendency for a more correct estimate to be made for the younger child. Neither educational level nor the occupation of the father was related to the validity of the estimate.

Boles (1959) compared the attitudes and personality characteristics of mothers of cerebral palsied children with those of the mothers of normal children. He concluded that mothers of handicapped children tended to overestimate the capacities of their children. (It appears that children who are handicapped physically and intellectually are more likely to be rated unrealistically than less handicapped children, and that younger children are more likely to be rated unrealistically than are older children (Hutt & Gibby, 1976, p. 359)).

Meyerowitz (1967) studied "awareness" of mental retardation in three groups of parents. Parents of children in the first grade E.M.H. (I.Q. range 60-85), parents of children in regular first grade but with I.Q. range 60-85 and parents of children in regular first grade I.Q. range 90-110 and matched on the basis of family socio-economic factors. Each family was interviewed three times during the two year period. The first interview at the beginning of the first school year, second at the end of the first school year, and the third at the end of the child's second school year. The interviews focused on questions relating to the parents' awareness of delayed abilities of the child. The parents of the retarded children reported that their child responded immaturely to the environment. They perceived that their child would complete fewer years of formal schooling. However, the life goals and occupational expectation for the E.M.H. child were not

significantly different from the matched average I.Q. children. Parents of retarded children who were placed in special education classes manifested greater awareness but 55% of the parents were judged to be unaware of the delayed capacities of their child. Meyerowitz concludes that with special class placement the child is placed in a situation of conflicting assessments. He argues for shared values between professionals and parents leading to greater educational efficiency.

Using the Alpern-Boll Developmental Profile as an estimate of the parents' awareness of the retardation of their child, this study seeks to answer the following questions:

1. Compared to professional assessments, how well are parents able to accurately predict the functioning level of their child.

2. Does the birth order of the child effect the parents' ability to predict the child's functioning level.

3. Does the child's age have any effect on the parent's ability to predict functioning level.

4. Does the severity of the child's retardation influence the prediction by parents.

METHOD

Subjects:

The subjects were 113 developmentally delayed, preschool children (69 males and 44 females) and their parents who participated in comprehensive evaluations while enrolled in the Early Family Intervention Program (E.F.I.P.), New Castle, Indiana. The children's ages ranged from 8 months to 6 years and 9 months, and lived with their parents in any one of 24 counties in Central Indiana. Their mean chronological age (CA) was 43.4 months (standard deviation = 18.7).

Procedure:

A Stanford-Binet Intelligence Scale or Cattell Infant Intelligence Scale was administered to each child and, with the parents as informant, an Alpern-Boll Developmental Profile was completed.

The testing was conducted by a licensed school psychometrist. First the Alpern-Boll Developmental Profile was administered using the parent or parents as informers. Scores in each of the five components of the Profile were obtained: physical age; self-help age; social age; academic age; and communication age. These individual scores are then averaged to compute the Average Functioning Age. The academic age is maintained as being roughly the same as the Mental Age from individually administered intelligence tests. Depending on the child's age, a Stanford-Binet Intelligence Test of the Cattell Infant Scale was administered to the child with parent still in the testing room.

Information concerning the family background, the child's social and medical history and other demographic data were gathered and recorded earlier by a social worker.

RESULTS

Mental ages from the Stanford-Binet and Cattell Scales were compared with the Academic Age and the Average Functioning Age from the Alpern-Boll Developmental Profile rather than I.Q. scores as others had done (Ewert & Green, 1957, Capobianco & Krov, 1964, Schulman & Stern, 1959).

Pearson correlation coefficients were conducted for the Mental Ages as obtained by the Stanford-Binet or Cattell Tests and the Average Functioning Age as determined by the Alpern-Boll Developmental Profile and yielded .85 and the Mental Ages and the Academic Age as determined by the Alpern-Boll Developmental Profile yielded .86. Both of the computed correlations are significant at the 1% level. This indicated a very strong linear relationship between the samples analyzed.

Question 2 reflecting whether birth order of the child affected parents' awareness of functioning level yielded the following Pearson correlation coefficients:

A.	Oldest child	r=.915	N=29
B.	Middle child	r=.944	N=12
C.	Youngest child	r=.941	N=56
D.	Only child	r=.959	N=16

Correlations indicate that parents are slightly more accurate in estimating the functioning level of an only child and the middle child. Birth order does not appear to greatly effect parents' awareness of retardation.

Question 3 regarded age of child at time of assessment and the relationship with parents' awareness of child's functioning level.

Birth to 3 years of age	N=43	r=.923
3 years to 6 years, 9 mos.	N=70	=.938

Indicating that parents are slightly more accurate in assessing the functioning level of the older child. Again the difference is rather slight.

Question 4 explored whether degree of retardation effects the parents ability to accurately estimate functioning level. The following functioning levels were deleneated:

I.Q. of 80 and above	N=19	r=.917
I.Q. of 36 to 79	N=58	r=.939
I.Q. below 35	N=36	r=.907

Differences here are also extremely slight but the data suggests that parents are more accurate in estimating the I.Q. range of moderate and mild than severe and profound or borderline and above.

In addition to comparing the M.A. estimates of the parents with the results of S-B testing, we were concerned with data from the various subtests of the Alpern-Boll. The Alpern-Boll Profile sub-tests provide information about the Gross Motor Age, Self-Help Age, Social Age, Academic Age, and Communication Age of the child. (Insert Sample Summary) This table indicates that the parents are fairly accurate in estimating the child's Gross Motor, Academic and Communication Mental Ages as compared to the Stanford-Binet M.A. Parents overestimated the child's self-help and social M.A.'s.

As indicated by the following tables representing various sub-groups of the sample, parents tend to overestimate the self-help age and social age more than they do the gross motor, academic or communication ages.

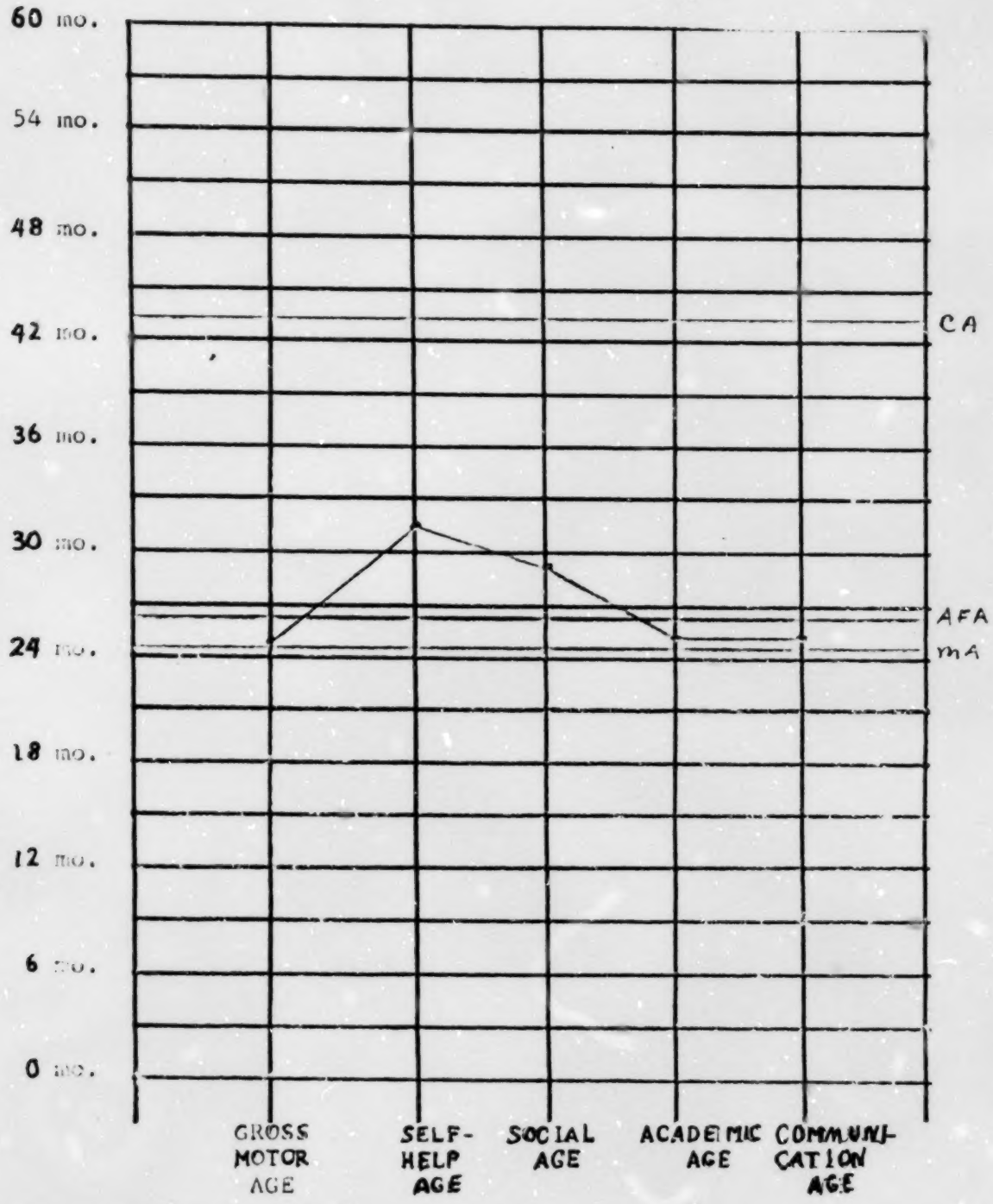
TABLE I

Comparisons between the Mental Age (MA) using either the Stanford-Binet or the Cattell Infant Scale and the Academic Age (AcA) of the child as generated by the Alpern-Boll Developmental Profile.

Total Sample (N=113)		
	MA and AcA	r = .86
Birth to 3 years old (N=43)		
	MA and AcA	r = .923
Over 3 years old (N=70)		
	MA and AcA	r = .938
IQ 0 to 35 (Severe-Profound MR) (N=36)		
	MA and AcA	r = .907
IQ 36 to 80 (Trainable-Educable MR) (N=58)		
	MA and AcA	r = .939
IQ over 80 (Borderline-Normal) (N=19)		
	MA and AcA	r = .917
Males (N=69)		
	MA and AcA	r = .961
Females (N=44)		
	MA and AcA	r = .924
Oldest Child in Family (N=29)		
	MA and AcA	r = .915
Middle Child in Family (N=12)		
	MA and AcA	r = .944
Youngest Child in Family (N=56)		
	MA and AcA	r = .941
"Only" Child in Family (N=16)		
	MA and AcA	r = .959

VARIABLES: MULTIPLY HANDICAPPED CHILDREN

Number of children: 113



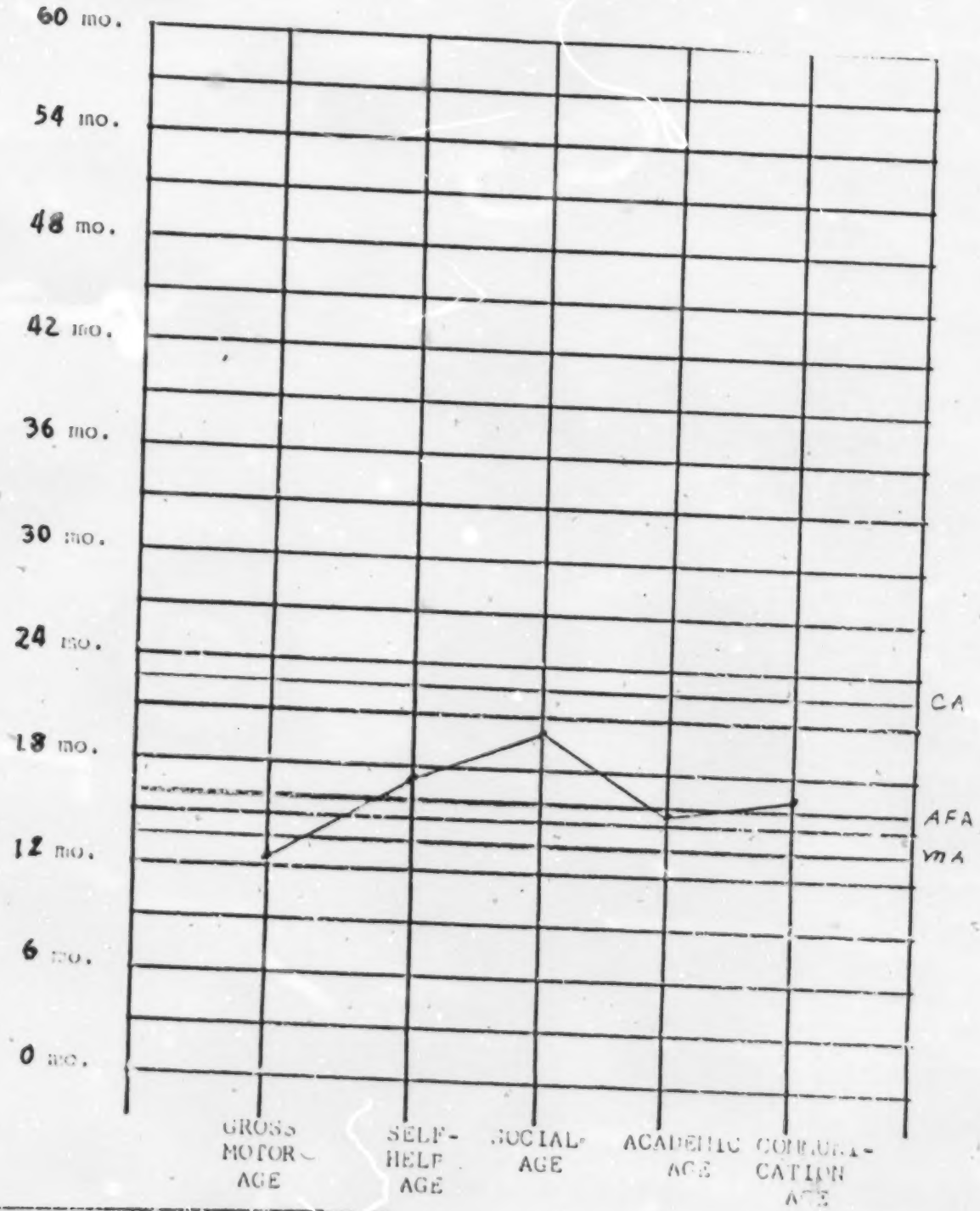
AFA - Average Functioning Age
MA - Mental Age
CA - Chronological Age

Table II

VARIABLES: CHILDREN UNDER

3 YEARS OF AGE

Number of children: 43



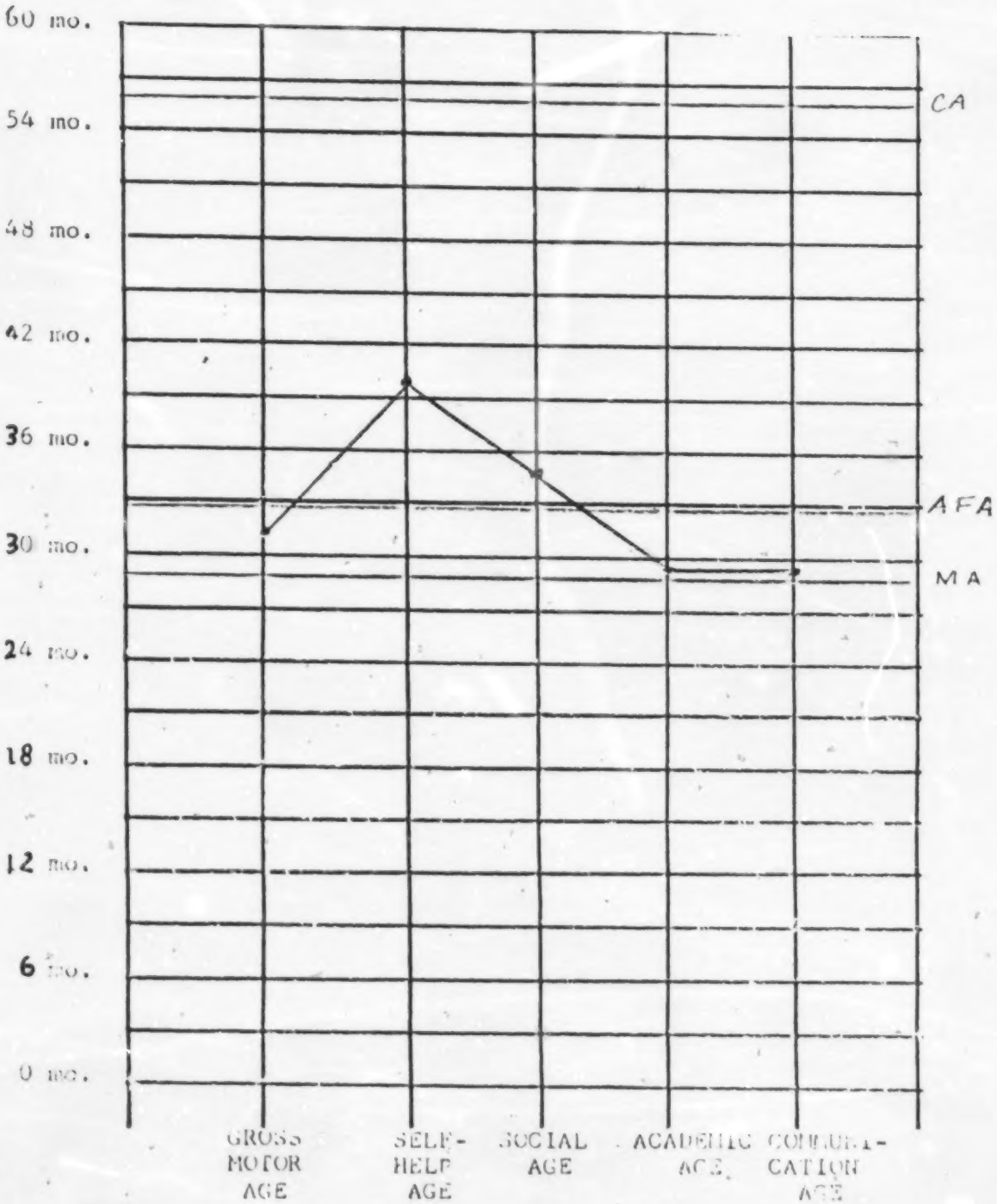
AFA - Average Functioning Age
MA - Mental Age
CA - Chronological Age

Table III

VARIABLES: CHILDREN OVER

3 YEARS OF AGE

Number of children: 70



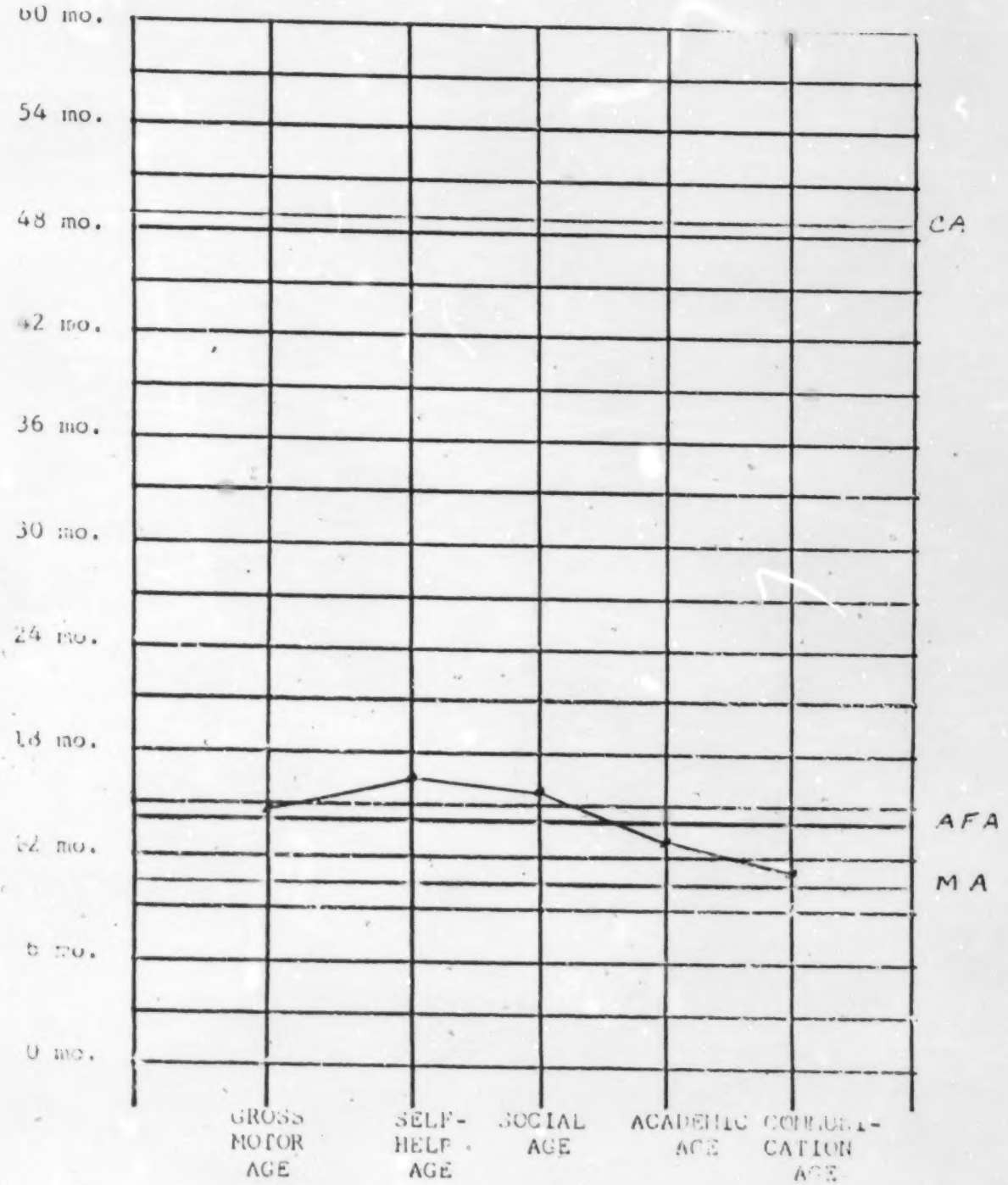
AFA - Average Functioning Age
MA - Mental Age
CA - Chronological Age

Table IV

VARIABLES: CHILDREN WITH

I.Q.: 0 - 35

Number of children: 36



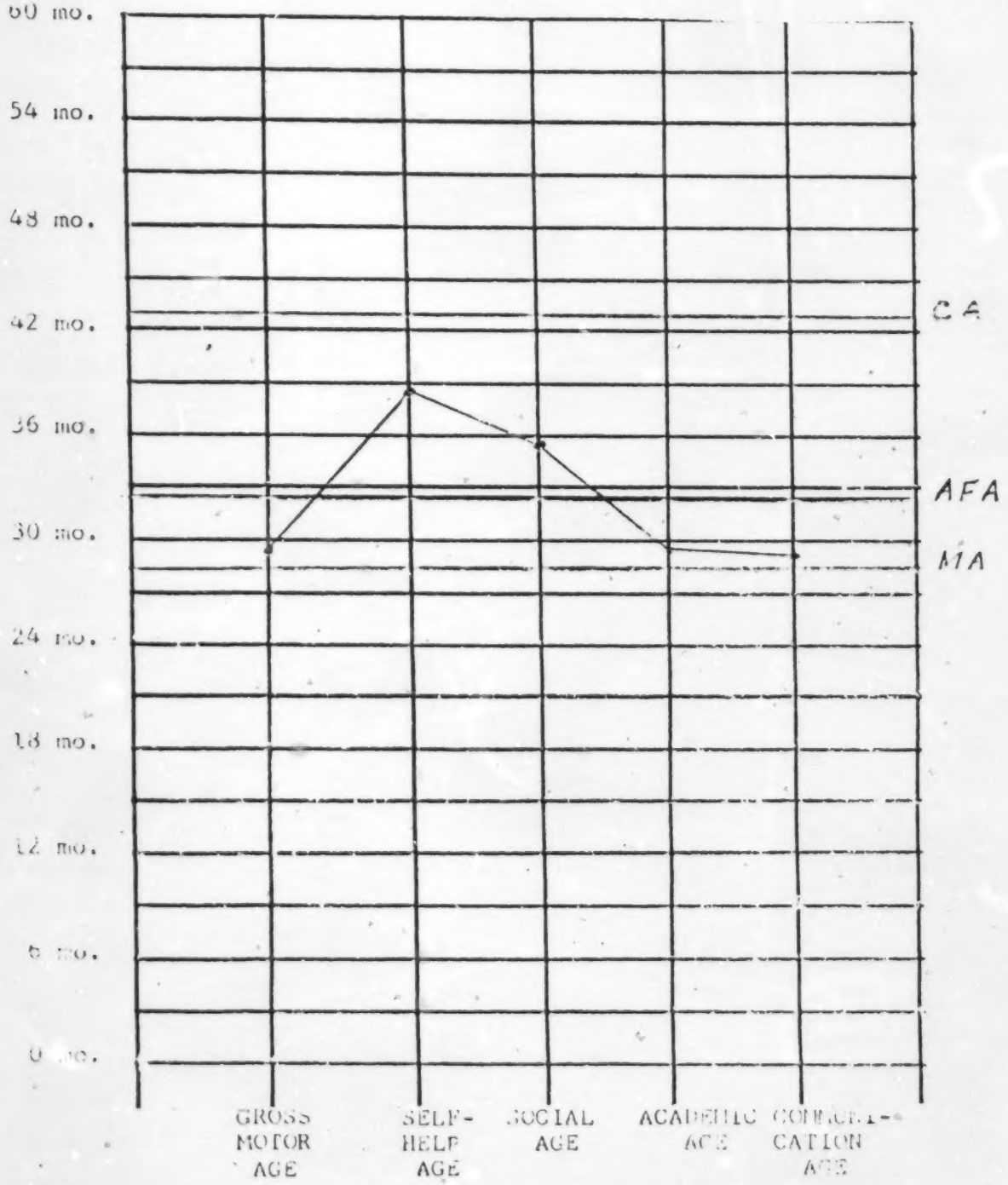
AFA - Average Functioning Age
MA - Mental Age
CA - Chronological Age

Table V

VARIABLES: CHILDREN WITH

I.Q.: 36 - 80

Number of children: 58



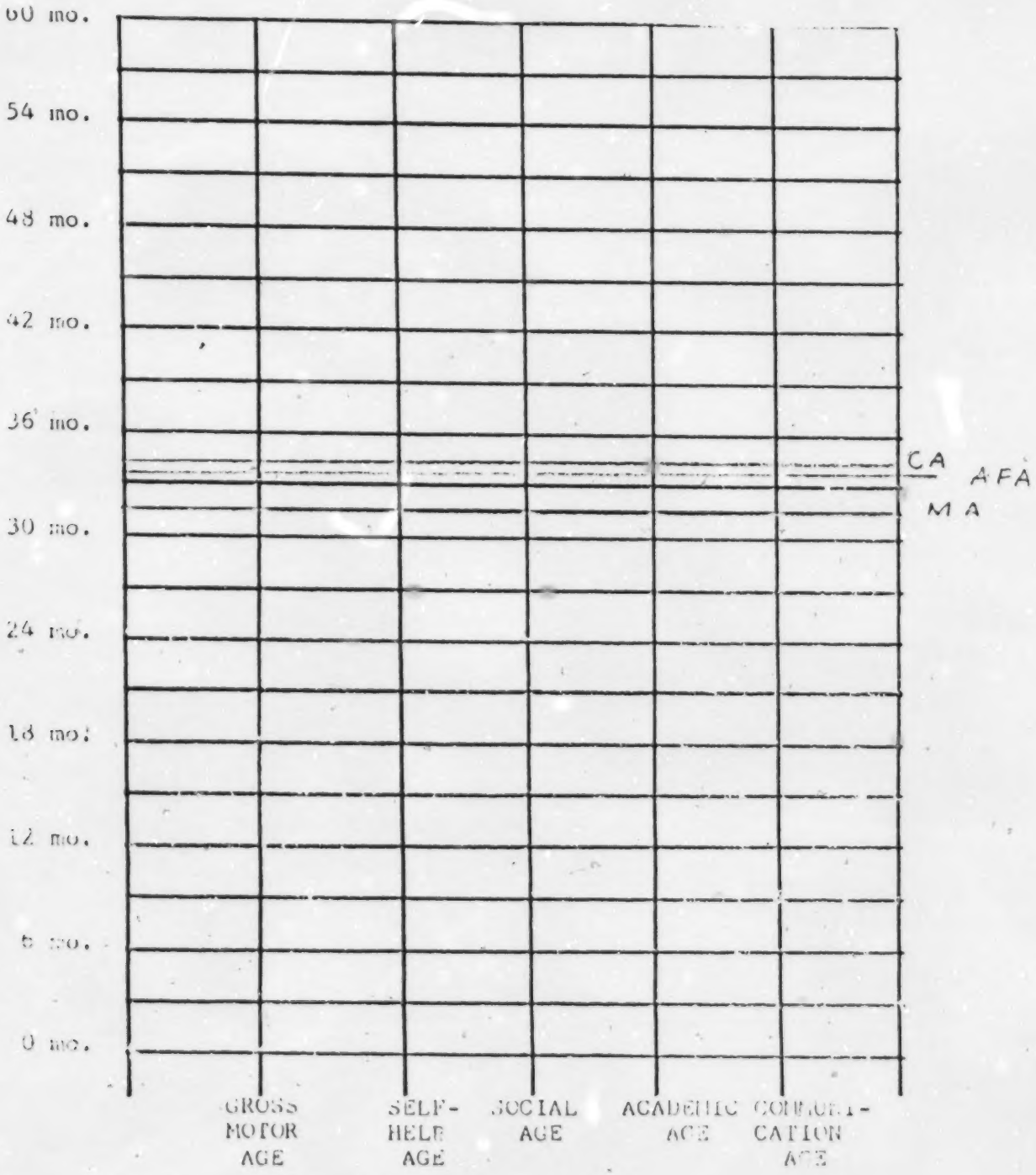
AFA - Average Functioning Age
MA - Mental Age
CA - Chronological Age

Table VI

VARIABLES: CHILDREN WITH

I.Q.: 80+

Number of children: 19



AFA - Average Functioning Age
MA - Mental Age
CA - Chronological Age

Table VII

DISCUSSION

The findings demonstrate a high degree of correlation between a child's test performance and his parents' estimate as measured by structured interview (Alpern-Boll Developmental Profile). These results give greater support to the notion that parents are aware of their child's functioning level or degree of retardation prior to seeking professional help.

The parents' estimate of intelligence can serve as a springboard for a discussion of the whole problem. They can be complimented for being accurate reporters and excellent observers of their child's limitations. This discussion can help in the subsequent discussion concerning the implications of these findings.

Another important realization is that often we professionals do not get an optimal performance from the child we test. This probably is most true when testing the handicapped child. In this case the parents' estimate of the child's functioning level may point out serious deficits in the testing performance that may be situational. These situations will require further testing and possible return to the home situation where the child's performance may more nearly represent their optimal performance.

Several other variables were explored, such as birth order and degree of retardation; little can be concluded from the results except that they do not appear to be the relevant variables as first conceived.

It should be noted that the Alpern-Boll Developmental Profile in its standardization did report correlations as high as found in this study, namely .85 (Alpern & Boll, 1970). This profile and others like it offer much help both in evaluation and curriculum development. The advantage of several age scores versus a mental age score is apparent particularly with the handicapped child.

It was interesting to note that parents frequently "overestimated" in the areas of self-help and social. Another interpretation might be that standardized intelligence tests don't sample many skills in either the self-help or social area and, therefore, the parents' appraisal may be more accurate than the obtained mental age might imply.

The findings of this study were basically similar to other findings in the literature, namely parents are generally good estimators of their child's functioning level. However, certain differences should be emphasized. First, our sample was composed of younger children (age range 8 months to 6 years, 9 months). Other studies sampled some preschoolers but none used preschoolers exclusively. Second, we compared mental ages with academic ages or average functioning age rather than I.Q. This made more sense to us and also required less transformation of the data. Thirdly, most of the children in our sample were multiply handicapped and many had overt physical disabilities in addition to mental retardation.

It should not be concluded from the results presented here that individually administered intelligence tests are unnecessary because of the accuracy of parents' estimates, but rather it is hoped that parents will be viewed as informed allies in an attempt to plan realistic and effective treatment plans. The results of this study make it possible for parents to join the team of experts who evaluate their children and have an important voice in that evaluation.

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